

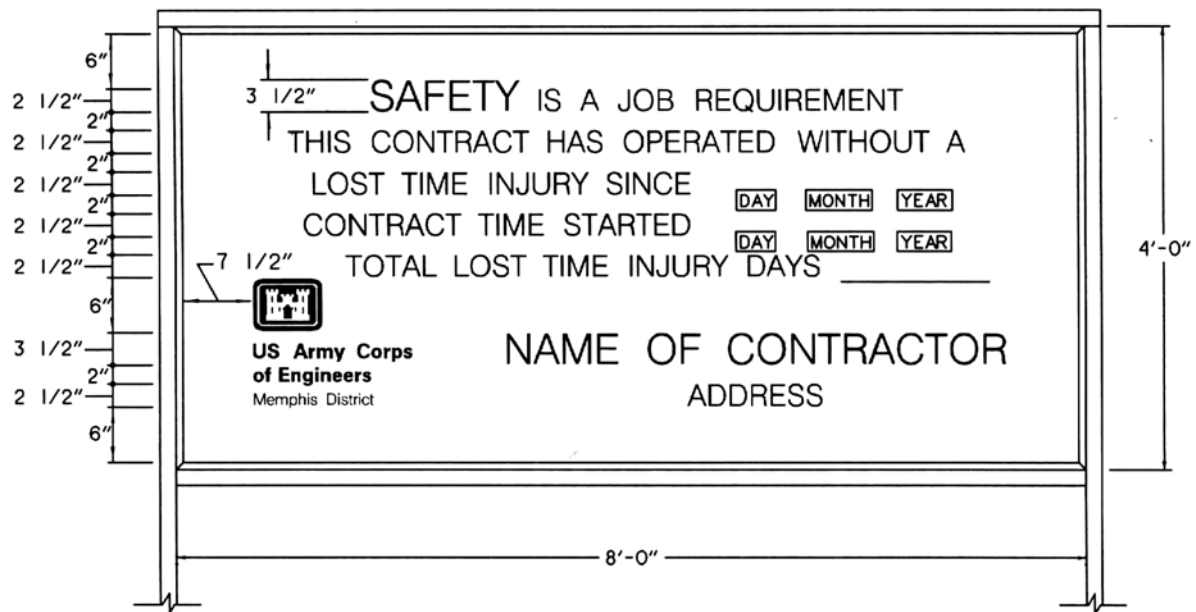
SECTION J  
LIST OF DOCUMENTS, EXHIBITS AND ATTACHMENTS

DOCUMENTS (Available from the Government upon award)  
Tennessee General Permit to Discharge Storm Water  
Submittal Register (Eng. Form 4288-R)  
Accident Prevention Program  
    Administrative Plan (LMV Form 358R)  
Accident Prevention Program  
    Job Hazard Analysis (LMV Form 359R)  
Accident Prevention Program  
    Fuel Oil Transfer-Floating Plant(LMV Form 414R)  
Transmittal of Shop Drawings, Equipment  
    Data, Material Samples, or Manufacturer's  
    Certificates of Compliance (ENG. Form 4025R)  
Safety and Health Requirements Manual (EM 385-1-1, Sep 96)

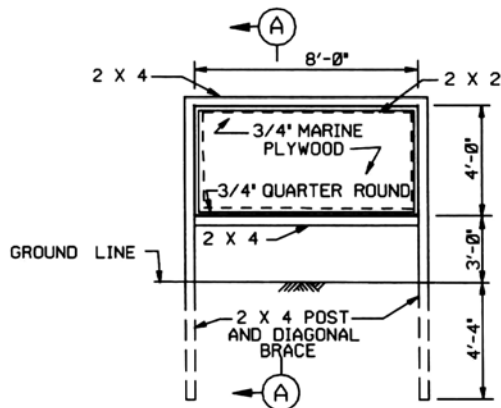
EXHIBITS (End of Section J)  
1. Safety Sign  
2. Stormwater Pollution Prevention Plan

Attachments (Drawings as stated in paragraph C-4 are Located in  
"PLANS" section)

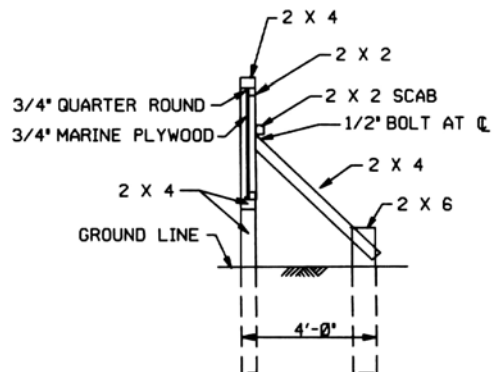
<u>Serial No.</u>	<u>File No.</u>	<u>Title</u>
22060	74/211.1	Articulated Concrete Mattress Typical Layout and Standard Details
21770	76/371.1	Locality Map Mattress Casting Field Richardson Landing, TN
19250	73/878.5	Richardson Landing, TN Casting Field Form Layout
21881	74/210	Steel Form For 16 Block Articulated Concrete Mattress



ELEVATION



ELEVATION



SECTION A-A

NOTES:

1. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN A DURABLE SIGN AS SHOWN.
2. WOOD IN CONTACT WITH GROUND SHALL BE TREATED LUMBER.
3. ALL EXPOSED SURFACES SHALL BE WHITE HOUSE PAINT.
4. LETTERING SHALL BE BLACK.
5. ENGINEER CASTLE DECAL FURNISHED BY GOVERNMENT.
6. 22 GA. SHEET METAL MAY BE USED IN LIEU OF PLYWOOD.



**US Army Corps  
of Engineers**  
Memphis District

ENGINEER CASTLE DETAIL

SCALE: NONE

MARCH 1995

U.S. ARMY ENGINEER DISTRICT, MEMPHIS  
CORPS OF ENGINEERS  
MEMPHIS, TENNESSEE

SAFETY SIGN

# **STORMWATER POLLUTION PREVENTION PLAN**

## **RICHARDSON LANDING CASTING FIELD, TENNESSEE**

*U.S. Army Corps of Engineers, Memphis District  
AUGUST 21, 2002*

# STORMWATER POLLUTION PREVENTION PLAN FOR RICHARDSON LANDING CASTING FIELD TENNESSEE

*U. S. Army Corps of Engineers, Memphis District*

## 1. PURPOSE AND OBJECTIVES

The purpose of this stormwater pollution prevention plan is to facilitate and document a thorough process for evaluating and preventing potential pollution impacts on the Richardson Landing Casting Field. The pollution prevention approach reflected in this plan focuses on two major objectives: (1) to identify sources of pollution which might affect the quality of stormwater discharges at this site, and (2) to describe and ensure that practices are implemented to minimize and control pollutants in stormwater discharges, thus ensuring compliance with the terms and conditions of the NPDES General Permit.

## 2. FACILITY DESCRIPTION

a. Location. The Richardson Landing Casting Field is located on 97.3 acres adjacent to the Mississippi River approximately 18 miles west of Covington, TN. It is located at the downstream limit of Chickasaw Bluff Number 2 at river mile 768.8.

b. Nature of Industrial Activity. The Richardson Landing Casting Field is used for the seasonal casting and year-round storage of articulated concrete mattress (ACM). ACM is used to construct revetments on the Mississippi River to protect the bank and prevent erosion. There is usually no activity on the field for about six to nine months of the year. Casting operations are performed by contract, require about three to four months to complete, and occur approximately every other year. During years when casting operations are performed, this work is usually done between May and September, but may occur later in the year. The casting operation itself consists of mixing the concrete, batching it, placing it in steel forms, and allowing it to cure. Operations to load the mat onto barges for transport to work sites are performed by Government labor and occur each year from about July to August.

c. Receiving Water. The receiving water is the Mississippi River, which runs along the north edge of the casting field. Sugar Creek runs along the eastern edge of the field, but a topographic

survey indicates that little drainage is discharged into it. The field is also subject to flooding during unusually high Mississippi River stages.

### 3. POLLUTION PREVENTION TEAM

The pollution prevention team for the Richardson Landing Casting Field shall consist of (1)Don Tutor, the Wynne Area Engineer,(2)Gary Hamlett, the on-site construction inspector, (3)Darian Chasteen, the design engineer,(4) Mike Jones, district environmental compliance coordinator, (5)Loy Hamilton, the Wynne Area environmental compliance coordinator, and (5)the Contractor's on-site representative (during casting operations).

This team shall meet prior to each casting contract (during the pre-work conference) and as required during the contract and non-casting periods.

### 4. POTENTIAL POLLUTANT SOURCES

a. Drainage. Drainage occurs primarily as sheet flow diagonally across the site and into the Mississippi River. The attached site map depicts the location of stormwater runoff control structures.

b. Inventory of Exposed Materials. The only materials exposed to stormwater on the site are:

- (1) Stacks of ACM (concrete)
- (2) Stainless steel ACM fabric
- (3) Steel forms for casting ACM
- (4) Fine Aggregate (Sand)
- (5) Coarse Aggregate (Crushed Limestone)

c. Spills and Leaks. During the last six years, there have been no significant spills or leaks of toxic or hazardous pollutants that have occurred in areas exposed to precipitation or that otherwise drain to a stormwater conveyance on the site.

d. Sampling Data. Sampling of stormwater discharges will be conducted at least quarterly each year that ACM is cast. The parameters to be measured include oil and grease, pH level, biochemical oxygen demand, total suspended solids, nitrogen, ammonia, and total recoverable iron. Also recorded will be (1) the date and duration (hours) of the storm event sampled; (2) rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; (3) the duration between the storm event sampled and the end of the previous measurable storm event; and (4) an estimate of the total volume (in gallons) of the discharge sampled.

e. Risk Identification and Summary of Potential Pollutant Sources. The materials permanently exposed to stormwater are relatively inert and not subject to erosion or transport by stormwater. Casting operations require the use of mechanized and motorized equipment which call for the on-site presence of fuels, oils, and lubricants. In addition, the forms in which the ACM is cast are lightly sprayed with oil to assist in pulling the forms without damaging the concrete. Oils that exhibit RCRA hazardous materials are not acceptable. Portland cement and fly ash are also required during the casting process, as are additives such as air-entraining admixture, water-reducing admixture, and calcium chloride.

## 5. MEASURES AND CONTROLS

a. Good Housekeeping. The Contractor shall at all times keep the field free from accumulations of waste material or debris, including those that might be exposed to stormwater. The contractor is also required to maintain the casting field, including any drainage and erosion control features, in good condition. This includes sprinkling the field as required to control dust and improve the surface of the field. Concrete, gravel, and spalls shall be incorporated into the field surface. Effluent from gravel washers and residue from washing material mixers shall be discharged at an authorized location. Ruts and depressions which might interrupt drainage shall be immediately filled and dressed. Leaking water lines or the digging of trenches shall not be permitted on the field. All blade work done in connection with maintaining the field surface shall be done with rubber-tired equipment.

b. Preventive Maintenance. During the life of a casting contract, the Contractor is required to maintain all measures constructed for pollution control under that contract as long as the operations creating that particular potential pollutant are being carried out.

c. Spill Prevention and Response Procedures. Good housekeeping and preventive maintenance measures will be taken to prevent spills and minimize adverse environmental impacts. Should a Contractor experience a spill or other activity which results in an adverse impact on the environment, he will take immediate action to contain and cleanup the spill in accordance with all applicable laws and requirements. If the Contractor fails or refuses to comply promptly, an order will be issued which stops all or part of the work until corrective action is taken. The contractor shall submit a plan outlining his response and procedures before beginning work.

d. Inspections. The on-site construction inspector will constantly monitor all activities at the casting field and will

take immediate action should any event occur which could have an adverse impact on the environment. Qualified personnel shall conduct compliance inspections and evaluations of the casting field operations, Contractor adherence to the stormwater plan, and stormwater control measures at a minimum of once every six months.

e. Employee Training. Early in the casting operation, the Contractor is required to conduct a training course that will emphasize all phases of environmental protection.

f. Recordkeeping and Internal Reporting Procedures. All activities are logged on a daily basis by the on-site inspector during casting operations. Any activities which might have an adverse environmental impact shall be reported immediately to the area engineer.

g. Non-Stormwater Discharges. Any harmful discharges or effluent, including water used in aggregate processing, concrete curing, oils, chemicals, etc., shall be contained and not allowed to enter any waterway or be exposed to stormwater.

h. Sediment and Erosion Control. Surface drainage areas within the casting field limits have been graded and are maintained to control and eliminate erosion. Silt fences, check dams, mulch, silt detention basins, and other such measures are specified and shall be utilized in the event of intense periods of rainfall. The Contractor shall perform maintenance as necessary to insure that all erosion control measures are operating correctly. See site map at the end of this plan.

i. Management of Runoff. Before beginning work, the Contractor shall submit in writing his proposals for controlling environmental pollution at the site, including his plans for debris disposal and managing stormwater discharge. These proposals are complemented by a required meeting with the Corps to develop a mutual understanding relative to environmental compliance and administration of his pollution control program.

## 6. SCHEDULE OF SWPPP SUPPLEMENTS AND UPDATES

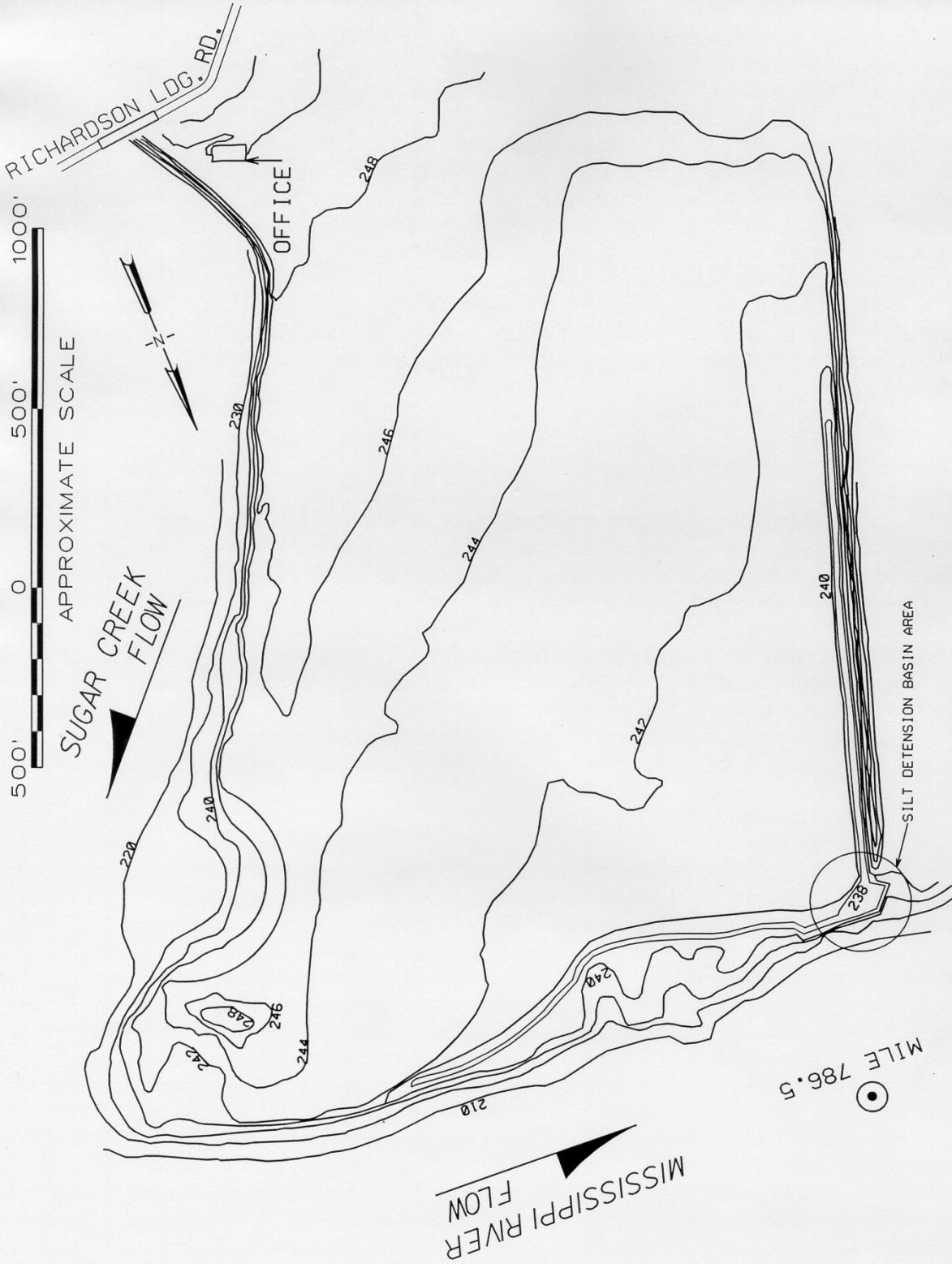
Supplements and updates to this stormwater pollution prevention plan will be prepared as monitoring progresses and when events require.

## 7. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified







DRAWING 1 OF 1		RICHARDSON LANDING, TN CASTING FIELD SWPPP SITE MAP		U. S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS MEMPHIS, TENNESSEE Design file name: CASTING2.dgn		Designed by: KKK Checked by: WM Submitted by:		Drawn by: KKK Checked by: WM		Plotted by: KKK Plot date: 26 SEPT 2001 Project ID: Roster file name:		Pen Table: NONE Color Table: SW,C18 Serial No.:		US ARMY CORPS OF ENGINEERS	
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